19.00 Fire Services

19.01 Generally

This Section outlines GU's minimum requirements for the follo]B0u(64 1(e g 3195 -1.sen)6.9(t)12.1(s)-6.7( )7.1(f)5(o)73).enf

- Energise alarms.
- Shut down any integrated ventilation systems, operate smoke doors, fire doors,
- emergency exit doors, fire dampers, smoke exhaust systems, make up air facilities, stair pressurisation systems and flammable gas services.
- Transmit a signal to the Pager Alert System (where installed) to activate the Pager System.
- Provide a signal to visual alarms.
- Transmit signal to operate electronic door locks.

The fire alarm system shall also incorporate an emergency warning and communication system to AS 1670-1 and AS 2220-1.

Fire detection and alarm systems shall comply with the Fire & Rescue Service Act 1990 Sections 104D and 104DA, and the 'Fire Alarm a -7lyAlua -7l (D)9.7e(-7lsFi)5.7genGsuaee e Unwanted Alarms' issued by the QFR

19.03 Fire Services Contractor Qualifications

Fire Services Contractors shall provide evidence that they are duly registered with the Fire Protection Contractors Registration Board of Queensland, and have such licences as required by State legislation, before commencing any installations.

19.04 General Equipment Requirements

All equipment associated with Fire Alarms, EWIS and EWS shall be provided by a recognised Fire Alarm company or Manufacturer with a proven record of high standard within the Fire Protection Industry for a period of not less than 10 years.

A spring return Fire Service Isolation button shall be fitted to the building FIP for testing purposes.

Trays and the duct shall be painted RED in colour where exposed or colour banded where concealed.

Fire Alarm cables shall not run on the same cable trays as electrically energised cables or be installed in Electrical or Data cable risers.

Refer to Section 20.00 Electrical Services for wiring in ceiling spaces and riser ducts.

19.09 Hydraulic Fire Services

19.09.01 Water Supply

The water supply for hydrants and hose reels shall be provided via a separate water service to the building isolated by double check valves located in the Valve Room.

19.09.02 Hydrants

Hydrants including signage and block plans shall be provided in accordance AS 2419.1.

Unless otherwise specified, hydrant systems shall be a' wet pipe' system.

System designs, hydraulic calculations and variations shall be submitted and agreed to with CLF prior to installation.

Hydrant booster installations where required shall meet the requirements of AS 2419.1/2/3.

The location, colour and design of fire booster installations shall be approved by the Building Surveyor and the QFRS prior to design finalisation.

The design of the enclosure must be approved by OFM. Masonry construction is preferred to metal cabinets.

Any inground spring type hydrants shall be of the A.W.E. (Associated Water Equipment) 'Maxi Flow' nylon coated type.

Where internal hydrants are installed, a safe discharge point shall be provided for the testing of the most disadvantaged fire hydrants. The discharge point shall be fitted with a 65mm round QRFS thread coupling and shall discharge to the Stormwater drainage system.

The discharge pipework shall be braced and supported -1.3( )te (i)-a s.9(st)1is-1.3( )-13.1(.-6.4( )7UFd)7.1(b.s)-5.9 pe.

The hold open devices shall be of a type, manufacture, configuration and design as agreed to by the UFO if they are an alternative to those nominated in Section 11.00 .

Electro magnetic hold open devices (EMHODs) shall be provided on all fire doors in fire isolated stairwells used for occupant circulation.

19.13 Door Control

Any doors secured by electric locks must be interfaced with the fire alarm system as outlined previously in this Section.

Refer to Section 11.00 for details of electric lock types.

19.14 Smoke Exhaust Systems

Any smoke exhaust systems incorporated into the building design shall be in accordance with the BCA and the relevant Australian Standards.

19.15 Fume Cupboards

Fire protection measures for Fume Cupboards shall comply with AS 2243-8 and with AS 3689-1 for Specialised Protection.

19.16 Fire Hazard Indices

Commonwealth Fire Board Fire Safety Circular 73 ‘Linings for Buildings’ including *Early Fire Hazard Indices* shall be used as a guide to determine acbend 6.5(136l(rm)7.1(t)12.(i)6.2(rd 6.t(te)7.r(ne a)als/TT4 1 Tf 2.33843

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Final Inspections - Authority for final inspections by QFRS Community Safety Officers shall be the responsibility of the Building Surveyor and/or the UFO.

Documentation - The following documentation shall be available at the time of both inspections as required by QFRS;

- Installation certificates (fire alarm systems, hydraulics, smoke control, etc).
- Test certificates for installed systems.
- Draft/Final Fire Alarm Zone schematic diagram.
- Draft/Final system 'Block Plan' (if applicable)

All Draft documentation must be provided for the Pre Approval inspections by the UFO.